Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

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Training and Education
Training and Education, NWSPD 20-1
Forecaster Development Program Training, NWSI 20-103

### GUIDELINES FOR PAPERS AUTHORED BY EASTERN REGION EMPLOYEES

**NOTICE:** This publication is available at: <a href="http://www.nws.noaa.gov/directives/">http://www.nws.noaa.gov/directives/</a>.

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<SIGNED> November 26, 2003

Dean P. Gulezian Date

Director, NWS Eastern Region

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- **1.** <u>Introduction.</u> The purpose of this supplement is to establish policies and procedures to be followed by the National Weather Service (NWS) Eastern Region (ER) employees concerning the submission, review, and subsequent publication of all forms of internal and external publications.
- **2.** <u>Policies and Procedures</u>. This supplement establishes the following policy: any manuscript authored or co-authored by a NWS ER employee will be submitted to the ER Scientific Services Division (SSD) Publication Focal Point (PFP) and ER SSD Chief for review to ensure scientific integrity and adherence to NWS policies and procedures. Participation in conferences by ER personnel for the purpose of reporting on research which was conducted on official duty or used government resources must also receive prior approval from ER SSD.

### 2.1 Overview.

**2.1.1** General Comments on Various Publications. ER management encourages employees to carry out scientific studies and investigations and communicate the results to others. There are several ways the results can be documented. The appropriate medium varies from study to study and depends on the scope and depth of the investigation and its intended audience.

The easiest way to document a study is to informally write it up and include it in the office reference files. Documentation might include elements such as: meteorological maps, analyses, interpretive discussions, and satellite imagery. Form and content can vary; however, the results should satisfy the intended purpose of the study and are shared within the office. For studies intended to receive wider distribution beyond the office, more structured documentation and a review by SSD is required. Appropriate types of publication information are given in Appendices A-G. In addition, to enhance communication of ideas, new technologies are encouraged to be utilized (Appendix H).

- **2.1.2** Quality of Work. It is the responsibility of the author to convey the main points of the work in a concise and logical manner. In addition, data and information must be accurate, and figures must be clear and legible. ER SSD can provide assistance with these, but the author has final responsibility for manuscript and figure quality. Generally, ER SSD recommends manuscripts and references follow a format and style similar to the refereed journals of the American Meteorological Society (AMS) (<a href="http://www.ametsoc.org/">http://www.ametsoc.org/</a>). See the AMS author's guide (<a href="http://www.ametsoc.org/pubs/authorsguide/pdf\_vs/authguide.pdf">http://www.ametsoc.org/pubs/authorsguide/pdf\_vs/authguide.pdf</a>) for details. For the purpose of review, figures and tables should be submitted on separate pages and not embedded in the main body of the manuscript. The manuscript, as well as satellite images, radar pictures, figures, photographs, and tables should also be sent electronically whenever possible. Additional information on each publication type can be found in Appendix A-G with more details at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>. Authors should consult with their MIC/HIC, SOO/DOH, and/or SSD if they are in doubt of the proper medium for their work.
- **2.1.3** Role of Supervisors. The Division Chief (DC), Meteorologist in Charge (MIC), or Hydrologist in Charge (HIC) should encourage the development of studies by members of their staff. The oversight of research and development and the papers that result from such efforts will be the responsibility of the DC, Science and Operations Officer (SOO), or the Development and Operations Hydrologist (DOH). The DC, SOO, or DOH will review all manuscripts before they

are submitted to ER SSD. All locally reviewed manuscripts must be approved through the appropriate DC, MIC, or HIC before submission to ER SSD.

- **2.1.4** Role of SSD. It is ER SSD's responsibility to provide clearance for all manuscripts including informal publications, and for manuscripts intended for formal publication. Manuscripts, including abstracts, are reviewed by SSD for scientific accuracy and technical correctness, adherence to NWS policy and procedures, and must be presented in a clear, concise, and credible form. In the review phase, ER SSD will critique and provide editorial suggestions, which may require additional iterations of review and rewriting. In the publication phase, ER SSD will provide guidance on selecting the appropriate venue for publication. All manuscripts are tracked in the ER SSD Publication database to ensure timely review.
- **3.** <u>Disclaimers and Acknowledgments</u>. There may be instances where the author's views do not express those of the NWS, thus warranting a disclaimer. There may also be instances where data sources or services used in the reported work need to be acknowledged. Should ER SSD determine that a manuscript requires such a designation, the author will attach either the appropriate disclaimer or acknowledgment within the manuscript. Specific disclaimer and acknowledgment information is found in Appendix I.
- **4. <u>Final Comments.</u>** This supplement has been written to assist Eastern Region employees interested in writing papers for publication. It is intended to show prospective authors what is expected of them and what they can expect from others throughout all stages of a paper's development. The goal is to assist authors in producing a final paper that will be a quality product that reflects favorably upon themselves and the National Weather Service.

### Appendix A.

## **Publication Review: Technical Attachment**

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1. Purpose and Philosophy	A-1
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- 1. <u>Purpose and Philosophy</u>. A Technical Attachment (TA) is the appropriate publication venue to report: (1) preliminary results of on-going research, (2) short case studies of significant events, (3) informational articles, and (4) documentation of forecast techniques. TAs are intended to provide a mechanism for authors to distribute information to an audience of mainly operational meteorologists and hydrologists. TAs are distributed electronically with the ER Staff Notes, posted to the ER public web page and internal ER SSD web page.
- **2. <u>Format.</u>** Manuscripts should be in one column, in 12-point Times New Roman font, and in either Microsoft Word, Word Perfect or plain text document format. For the purpose of review, figures and tables should be submitted on separate pages and not embedded in the main body of the manuscript.
- **3.** <u>Review Process</u>. All manuscripts authored or co-authored by ER employees will be submitted to ER SSD for review. It is the goal of ER SSD to complete the review of TAs within 4 weeks. ER SSD will solicit additional reviewers from appropriate subject matter experts, as needed. The submitted TA will then be returned to the author for any recommended changes. Detailed information on TAs can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>.

### Appendix B.

### **Publication Review: Technical Memorandum**

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1. Purpose and Philosophy	B-1
2. Format	B-1
3 Review Process	B-1

- 1. <u>Purpose and Philosophy</u>. A Technical Memorandum (TM) is the appropriate venue for authors to publish: (1) results of work in progress, (2) detailed case studies of meteorological or hydrological events, (3) documentation of technical procedures and practices, which have interest beyond the local area, and (4) presentations that require the display of large amounts of data, tables, computer algorithms, and/or figures. The TM are distributed to Eastern Region field offices, other Regional Headquarters, NWS Headquarters, NOAA offices, research laboratories, some external groups (e.g., universities), available on the ER public web page and internal ER SSD web page. They are also catalogued and made available by the Department of Commerce (DOC) National Technical Information Service (NTIS).
- **2. <u>Format.</u>** Manuscripts should be in one column, 12-point Times New Roman font, and either Microsoft Word, Word Perfect or plain text document format. For the purpose of review, figures and tables should be submitted on separate pages and not embedded in the main body of the manuscript.
- **3.** Review Process. All manuscripts authored or co-authored by ER employees will be submitted to ER SSD for review. It is the goal of ER SSD to complete the review process in 6 to 8 weeks. ER SSD will solicit additional reviewers from appropriate subject matter experts, as needed. The submitted TM will then be returned to the author for any recommended changes. Detailed information on TM can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>.

### Appendix C.

## **Publication Review: Training and Evaluation Module**

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1. Purpose and Philosophy	C-1
2. Format	C-1
3. Review Process	

- **1.** <u>Purpose and Philosophy</u>. A Training and Evaluation Module (TEM) is used to present concise job-related training material to improve performance or knowledge in a specific area. It differs from the other publications in that it contains clear training objectives at the beginning, practice exercises within the text, and closes with an evaluation section to allow the reader to assess their progress. Importantly, TEMs are designed to be *completed within approximately one hour*. TEMs are distributed to all ER field offices, other Regional Headquarters, NWS Headquarters, and posted to the ER public web page and internal ER SSD web page.
- **2.** <u>Format.</u> The TEM provides a learning experience in a brief, modular format that is "readable" via traditional paper format, computer based, etc. Manuscripts should be in one column, 12-point Times New Roman font, and either Microsoft Word, Word Perfect or plain text document format. For the purpose of review, figures and tables should be submitted on separate pages and not embedded in the main body of the manuscript.
- **3.** <u>Review Process</u>. All manuscripts authored or co-authored by ER employees will be submitted to ER SSD for review. It is the goal of ER SSD to complete the reviews of TEMs within 4 weeks. ER SSD will solicit additional reviewers from appropriate subject-matter experts, as needed. The submitted TEM will then be returned to the author for any recommended changes. Detailed information on TEMs can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>.

## Appendix D.

#### **Publication Review: AWIPS Technical Note**

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2. Format	D-1
3. Review Process	D-1

- **1.** <u>Purpose and Philosophy</u>. An AWIPS Technical Note (ATN) is a venue to document procedures that add, modify, or enhance features and capabilities of AWIPS. ATNs are reviewed by ER SSD for accuracy and technical correctness, and must be presented in a clear, concise, and credible form before being published on the ER internal SSD publication web page.
- **2. <u>Format.</u>** Manuscripts should be in one column, 12-point Times New Roman font, and in either Microsoft Word, Word Perfect, or plain text document format. For the purpose of review, figures and tables should be submitted on separate pages and not embedded in the main body of the manuscript.
- 3. <u>Review Process</u>. All manuscripts authored or co-authored by ER employees will be submitted to ER SSD for review. It is the goal of ER SSD to complete the reviews of ATNs within 3 weeks. The review takes place in two phases. ER SSD will perform its review within 2 weeks, contacting the author if necessary. The submitted ATN will then be sent to a volunteering Field Office for additional testing and review. The Field Office will have 1 week to perform this review. Once the manuscript is returned from the Field Office, it will be returned to the author for any suggested changes or clarifications. Detailed information on ATNs can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>.

## Appendix E.

### **Publication Review: Weather Event Simulator Simulation Guide**

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1. Purpose and Philosophy	E-1
2. Format.	E-1
3. Review Process.	E-1
4. References	E-2

- 1. <u>Purpose and Philosophy</u>. A Weather Event Simulator (WES) Simulation Guide provides documentation on how a particular WES data set may be used to train individuals on forecasting techniques using past weather events. The simulation guide should be written such that other trainers may easily make use of the simulation guide and clearly state the expected results from its use.
- **2.** <u>Format.</u> The simulation guide manuscript should be in one column, 12-point Times New Roman font, and in either Microsoft Word, Word Perfect, or plain text document format. Figures, images, and/or tables should be included *within* the text.

A data set needs to accompany the simulation guide. The data should be written to a CD or DVD in the format the WES can read, which is currently -R. The author will include instructions on how to load the data into WES. The author will be responsible for distributing data to other trainers upon request, since the author is ultimately the most familiar with the data. This interaction among trainers and the author will facilitate a cooperative and collaborative learning environment. The ER SSD will provide assistance in data distribution, if and when the number of requests becomes too large for the author to handle in a timely manner. For archival purposes, the ER SSD will keep a copy of the data and simulation guide.

3. Review Process. All manuscripts authored or co-authored by ER employees will be submitted to ER SSD for review. It is the goal of ER SSD to complete the reviews of simulation guides within 2 weeks. ER SSD will review the simulation guide to ensure clarity and sound training methodology. However, the training exercise itself will not be examined in great detail. Simulation guide templates are available from the ER SSD (Auld 2002) and the Warning Decision Training Branch (WDTB 2002). ER SSD will solicit additional reviewers from appropriate subject-matter experts, as needed. The submitted simulation guide will then be returned to the author for any recommended changes. Detailed information on simulation guides can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>. Upon completed review, the ER SSD can assist authors interested in submitting their WES simulation guide for inclusion in COMET's case study library.

## 4. References.

Auld, Rosemary, 2002: Weather Event Simulator. *WES Simulation Guide: An Author's Reference*, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, 6 pp. [Available from the NWS Eastern Region Headquarters, 630 Johnson Ave., Bohemia, New York 11716]

National Weather Service, 2002: Weather Event Simulator. *Simulation Guide: April 8, 1998 Event*, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, 56 pp. [Available from the NWS Warning Decision Training Branch, Norman, Oklahoma.]

### Appendix F.

## **Publication Review: Conference Abstract/Paper**

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2. Format	F-1
3. Review Process	F-1
4. Publication Page Charges and Other Fees.	F-1

- 1. <u>Purpose and Philosophy</u>. Professional conferences are a means by which research may be shared with the scientific community in a timely fashion without a rigorous review process. A conference presentation is an appropriate medium to present: (1) results of a research project that has broad-based scientific interest, (2) case studies of meteorological or hydrological events, and (3) documentation of new techniques relevant to both NWS and non-NWS interests.
- **2. <u>Format.</u>** Manuscripts submitted to ER SSD for review should be in the format required by the conference. The format, procedures, and deadlines for abstracts and pre/post print manuscripts submitted to the conference are listed in the "Call for Papers" of professional publications such as the *Bulletin of the American Meteorological Society* (<a href="http://www.ametsoc.org/meet/ann/calendarweb.pdf">http://www.ametsoc.org/meet/ann/calendarweb.pdf</a>) , or the *National Weather Digest* (<a href="http://www.nwas.org/meetings/meetings.html">http://www.nwas.org/meetings/meetings.html</a>) .
- **3.** Review Process. All conference abstracts and pre/post-print manuscripts authored or coauthored by ER personnel will be submitted and reviewed by ER SSD. Most conferences request an abstract in their Call for Papers for use in selecting participants. This review of abstracts and pre/post-print manuscripts will indicate to ER SSD that the author wishes to attend the conference. ER SSD will set abstract and pre/post-print review deadlines typically 2 weeks prior to the conference submission deadline. It is the goal of ER SSD to complete the review of abstracts within 1 week. The submitted abstract will then be returned to the author for any recommended changes.

After an abstract is accepted for a conference, the author of the pre/post-print manuscript will send their pre/post-print manuscript to ER SSD for review before submission to the conference. The primary purpose of this review is to ensure that the pre/post-print manuscript is technically correct. It is the goal of SSD to complete this review within 2 weeks. The submitted pre/post-print manuscript will then be returned to the author for any recommended changes. After review and approval by ER SSD, it is the author's responsibility to submit the finished manuscript to the conference. Detailed information on conference abstracts and pre/post print manuscripts can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>.

**4.** <u>Publication Page Charges & Other Fees.</u> When submitting an abstract to a conference and the leader author is a NWS employee, the author's office will be responsible for the abstract fee, as well as any associated conference registration fee. If a pre/post-print is requested by the

conference, ERH will provide funding for pre/post-print page charges. If color figure or images are included for publication in a non-electronic format, it will be the discretion of ERH, in consultation with the author, to determine which if any figures or images will be maintained in color due to cost constraints. Further information on publication page charges can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/pcharge\_req.htm">http://www.werh.noaa.gov/ssd/erps/pcharge\_req.htm</a>.

### Appendix G.

#### **Publication Review: Professional Journal**

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2. Format	G-1
3. Review Process	G-1
4. Copyright transfer	G-1
5. Publication Page Charges	G-2

1. <u>Purpose and Philosophy</u>. An article in a professional journal is the appropriate medium to publish: (1) final results of a project that is of broad-based scientific interest, (2) detailed, high-quality case studies of meteorological or hydrological events, and (3) documentation of new techniques relevant to both NWS and non-NWS personnel.

Formal publications in professional journals such as *Weather and Forecasting*, *Monthly Weather Review*, or *National Weather Digest* receive international distribution throughout the scientific community. Each journal usually has a statement of purpose listed on its inside cover. Authors, in concert with ER SSD, will determine a journal most appropriate for publication of the work in the formal literature

- **2.** <u>Format.</u> Manuscripts submitted to ER SSD for review should be in the format required by the refereed journal.
- **3.** <u>Review Process</u>. All manuscripts authored or co-authored by ER employees will be submitted and reviewed by ER SSD. This indicates to ER that support for publication expenses should be allocated. The review should take no longer than 6 to 8 weeks. Both manuscripts intended for a traditional paper journal or an electronic journal will undergo the same review process. After review and approval by ER SSD, it is the author's responsibility to submit the finished manuscript to the journal.

Most journals solicit three rigorous (and often anonymous) reviews by "peers" chosen by the editor. Based on the reviews, the editors will either accept the paper outright (unconditional acceptance is rare), accept it with pending revision, or reject it. If the manuscript is accepted pending revision, the author must reply to each reviewer's comments by changing the text or presenting a good argument to the editor on why a specific point is not being changed. During the revision process, ER SSD (and the SOO, DOH, or designated focal point) will assist in any way possible. This entire process can take several months. Publication usually occurs about 4 months or more after the manuscript is accepted.

**4.** Copyright Transfer. The refereed journal (i.e., AMS published journals) will frequently

require a copyright transfer form to be completed in the submission/review process of journal manuscripts. For AMS journals, U.S. Government employees will complete the U.S. Government copyright transfer form, as the AMS requires:

(<u>http://www.ametsoc.org/pubs/copyrightinfo/AMS\_copyright\_government.pdf</u>) and for non-Government employees:

(http://www.ametsoc.org/pubs/copyrightinfo/AMS copyright transfer.pdf).

**5.** Publication Page Charges. After the ER SSD review and upon acceptance and final review by the professional journal, ERH will provide funding for manuscripts that are not supported by external sources such as grants. If color figures or images are included within the manuscript, it will be the discretion of ERH, in consultation with the author, to determine which if any figures or images will be maintained in color. If the manuscript is reporting on work that is supported by an external source, such as a grant, the external source is responsible for publication charges. Further information on publication page charges can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/pcharge\_req.htm">http://www.werh.noaa.gov/ssd/erps/pcharge\_req.htm</a>.

## Appendix H.

## **Electronic Supplemental Material**

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1. General Information. ER SSD is encouraging the submission of supplemental material in electronic format to supplement traditional methods of manuscript publishing. Supplemental material may include figures, satellite imagery, radar images, or animations. The manuscript itself must stand alone in printed form, but the inclusion of supplemental material may enhance the manuscript and will be indicated by a footnote on the title page. The supplemental material must be relevant and add meaning to the manuscript. The advantages of electronic supplemental material include the inclusion of a greater number of figures and images than printed form, the capability of animations, and the cost advantage to include color. Detailed information on electronic supplemental material can be found at: <a href="http://www.werh.noaa.gov/ssd/erps/erps.html">http://www.werh.noaa.gov/ssd/erps/erps.html</a>.

## Appendix I.

## **Disclaimers and Acknowledgments**

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2. Disclaimers	I-1
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- **1. Overview.** Instances arise where: 1. the author's views do not express those of the NWS, 2. data sources or services used in the reported work need to be acknowledged, then the appropriate disclaimer or acknowledgment will be attached to the manuscript.
- 2. <u>Disclaimers</u>. Should ER SSD determine that a manuscript could reasonably be misconstrued as presenting a position of the National Weather Service (NWS) when it does not, the following disclaimer is required: "The views expressed are those of the author(s) and do not necessarily represent those of the National Weather Service." per National Weather Service Directive 100-1.
- 3. Acknowledgments.
- 3. 1 Specific Acknowledgments.
- **3.1.1** <u>Lightning Acknowledgment.</u> Lightning data is provided to the NWS by Vaisala/GAI. The agreement NWS has with Vaisala/GAI states the company provides lightning data under a limited use license with the NWS. The data is always the property of the company. The contract allows the NWS to receive and use the data in real time, archive the real time data for later application by authorized users, and purchase archive data. No redistribution outside of the authorized users listed in the agreement is allowable.

When using the data for formal presentation or refereed papers, please provide the following acknowledgment: "Use of lightning data by the NWS provided through a license agreement with Vaisala/GAL."

3.1.2 Grant or Project Acknowledgment. Research that is supported by a grant (i.e., CSTAR or COMET) will provide an acknowledgment to include the grant number, grant or project title, and where to obtain additional information regarding the grant or project. When providing a grant or project acknowledgment, use the following as a guide: "This work was supported by <Grant name and number>, awarded to <Institution> as part of the <grant or project name>. Additional information concerning <grant or project name> may be found at <internet address>."

#### **Attachment 1**

## Glossary of terms

#### **Terms**

**External publications** - The distribution of an ER publication outside NOAA/NWS to the wider scientific community, including international distribution; or referring to outside of NOAA/NWS.

**Formal publication** - A review of a publication that undergoes an external, rigorous peer review.

**Informal publication** - A review of a publication that undergoes review by ER SSD and not an external peer review.

**Internal publications** - The distribution of an ER publication with NOAA/NWS primarily intended for NWS personnel.

**Refereed journal** - a publication that contains only articles or papers that have undergone an external peer review